

*Tilapia zillii* breeds all year round in the equatorial Lake Naivasha with slightly high breeding intensity during wet months (March, May and July–August). A sex ratio of 1 : 1.28 was found between males and females. The smallest mature male and female were 9.0 and 11.0 cm respectively. The fecundity ranged from 2990 to 12344 eggs, with a mean of 6606 eggs. Fecundity showed a curvilinear relationship with total length ( $\log F = 1.7034 + 1.6370 \log L$ ) and a linear relationship with body weight ( $F = 2197 + 28.76 W$ )